# **CMS5100 Patient Monitor**



## **Brief introduction**

## 1 Introduction

CMS5100 Patient Monitor is a feature-rich monitoring device that can be applied to adults, pediatric and neonate. User can choose different measurement parameters according to different needs. The patient monitor can monitor NIBP, SpO<sub>3</sub>, PR and TEMP. It integrates the function of parameter measuring and displaying into a compact, lightweight patient monitor, which is suitable for all levels of hospitals, community medical and home use.

## 2 Features

1) Be applicable for NIBP, SpO<sub>2</sub> and TEMP monitoring of adult, pediatric and neonate of all ages, easy to operate, high cost-effective;

- 2) Be applicable for medicine, surgery, operating room, ICU/CCU, emergency room, obstetrics and gynecology, pediatrics;
- 3) Compact and flexible appearance, easy for carrying and suitable for indoor and outdoor (in ambulance) monitoring;
- 4) Built-in rechargeable lithium polymer battery, ensures uninterrupted monitoring;
- 5) Perfect menu design, user-friendly interface;
- 6) Display the measurement result of SYS, DIA, SpO<sub>3</sub>, PR and bar graph by the display screen of high-brightness digital tube;
- 7) 2.8" (320×240) true color TFT LCD screen, displays the information of TEMP data, time, SpO Plethysmogram, alarm condition, trend graph, list and system settings, etc.;
- 8) Visual and audible alarm for SYS, DIA, MAP, SpO<sub>2</sub>, PR and TEMP, and upper and lower limit of alarm can be set as necessary;
- 9) Independent nonvolatile memory, storage for up to 2,000 groups of NIBP data, 7900 groups of TEMP data and 78,000 groups of SpO data;
- 10) Convenient and quick in reviewing measurement data, available for reviewing the NIBP trend graph of 24 hours, TEMP data of 24 hours and SpO trend graph of 22 hours.

### 3 Performance

#### **3.1 NIBP**

Using Oscillometry technology(also called Oscillography technology) to measure the blood pressure.

- 1) Measurement mode: manual/auto/continuous
- Measurement interval in auto mode:  $1, 2, 3, 4, 5, 5 \times n(n=2, 3, 4...51)$  min.
- 3) Resolution: 1 mmHg
- 4) Accuracy: max mean error: ±5 mmHg; max standard deviation: 8 mmHg.
- 5) Overpressure protection: dual protection for both software and hardware
- 6) Others: reset, self-testing and accuracy testing of static pressure
- 7) Measurement range:

#### Adult

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SYS 40 mmHg~270 mmHg
DIA 10 mmHg~215 mmHg
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#### Pediatric:

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SYS 40 mmHg~200 mmHg
DIA 10 mmHg~150 mmHg
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#### Neonate:

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SYS 40 mmHg~135 mmHg
DIA 10 mmHg~100 mmHg
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#### 3.2 SpO<sub>2</sub>

Using Photoelectric Oxyhemoglobin Inspection Technology combined with Capacity Pulse Scanning & Recording Technology to measure the SpO<sub>2</sub>.

- 1) Measurement range: 0 %~100 %
- 2) Alarm range: 0 %~100 %
- 3) Resolution: 1 %

4) Accuracy: 70 %~100 %,  $\pm 2$  %; below 70 % unspecified.

## 3.3 PR

Using Photoelectric Oxyhemoglobin Inspection Technology combined with Capacity Pulse Scanning & Recording Technology to measure the pulse rate.

- 1) Measurement range: 25 bpm~250 bpm
- 2) Alarm range: 25 bpm~250 bpm
- 3) Resolution: 1 bpm
- 4) Accuracy:  $\pm 2$  bpm or  $\pm 2$  %, whichever is greater

### **3.4 TEMP**

Using thermal resistor method to measure body surface temperature or body cavity temperature in an accurate, safe and convenient way.

- 1) Measurement range: 0 °C~50 °C
- 2) Alarm range: 0 °C~50 °C
- 3) Resolution: 0.1 °C
- 4) Accuracy:  $\pm 0.1$  °C

## 3.5 Safety and Power supply

- 1) Power supply: rated voltage: ~220 V, rated power: 50 Hz
- 2) Safety classification: Class I equipment, type BF defibrillation-proof applied part

## 4 Accessories

- 1) One User Manual
- 2) One power cord
- 3) One power adapter
- 4) One SpO<sub>2</sub> sensor
- 5) One adult NIBP cuff
- 6) One NIBP extension tube
- 7) One TEMP probe

## 5 Physical characteristic

Dimension: 190 mm(L)×162 mm(W)×240 mm(H)

Weight: about 1.6 kg